# *PISANIA* BIVONA, 1832 (MOLLUSCA : GASTROPODA) : ITS TYPE SPECIES, AND PROPOSED ADDITION TO THE OFFICIAL LIST OF GENERIC NAMES IN ZOOLOGY. Z.N.(S.) 1521

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This application deals with a generic name that has been in general use since its inception over a hundred years ago, but whose first valid designation of a type-species is based on a name that is essentially a *nomen dubium.* In order to place the generic name on a firm foundation it is here proposed to request the use of the Commission's plenary powers to invalidate the first apparently valid type-designation, to accept the next type-species designation, and to place the name and its type-species on the proper Official Lists.

2. The genus *Pisania* was founded by Bivona in 1832 (*Effem. sci. lett. Sicilia* 2 : 8) for three new species of Mediterranean marine mollusks. Not only did the author give a detailed generic description—shell and soft parts—but the three species were well described and figured. These three species : *P. striatula*, *P. laevigata*, and *P. nodulosa*, are readily recognisable as species now bearing the following names respectively : *Pisania striata* (Gmelin, 1791) ; *Mitrella scripta* (Linnaeus, 1758) ; and *Pisania* (*Aplus*) *dorbignyi* (Payraudeau, 1826).

3. As the first species is the only one that will concern us, and since the synonymy cited under this species is involved in the presentation of this case, I will list the synonymy cited by Bivona under *Pisania striatula* together with comments as to their modern equivalents :

*Purpura fasciolaria* Lam. Hist. 7, p. 249 ? (*Pisania striata* (Gmelin))
*Purpura variegata* Risso Hist. 4, p. 167 ? (? *Pisania striata* (Gmelin))
*Voluta syracusana* Gmel., p. 3456, n. 78 (? *Mitrella scripta* (Linnaeus))
Lister t. 964, f. 49, e (*Columbella flugurans* Lamarck)
Bonan. Recr. 3, f. 40 (? *Mitrella scripta* (Linnaeus))

4. The first author to accept and use *Pisania* was Philippi (1841, *Arch. Naturgesch.* 7 : 265–266), who added several species to the genus. For Bivona's first species he used the name *Murex pusio* Linnaeus, with which he also synonymized *Buccinum maculosum* Lamarck. He was one of many early workers who, with admittedly some justification, used Linnaeus's name *pusio* for the Mediterranean, instead of the West Indian species with which it is now associated. This has been the reason for the frequent but invalid citation of *pusio* Linnaeus as the type-species of *Pisania*, earlier workers having in mind the Mediterranean species, and later workers transferring this concept to the West Indian shell. Both species are now considered to be congeneric.

5. Gray in 1847 (*Proc. zool. Soc. London* 15 : 133) gave "*Bucc. maculosum*" as the type-species of *Pisania*, but as this is not one of the original species, the designation is invalid. In the same year, but a month later, Hermannsen (1847, *Ind. Gen. Malac.* 2 : 274) designated as type-species *Voluta syracusana* Gmelin, a valid designation, as it is one of the synonyms listed by Bivona.

This same designation was given by Bucquoy, Dautzenberg, & Dollfus (1882, *Moll. Marins Roussillon* **1** : 25).

6. A difficulty arises when we try to determine the identity of *Voluta syracusana* Gmelin (1791, *Syst. Nat.* (ed. 13) : 3456). Although many workers, beginning with Bivona and Philippi, have cited this species as a synonym of *Pisania striata*, this assignment is not at all obvious. The species is based on Bonanni's description and figure (1680, *Recr. Mebtus Oculi* **2** : 118, fig. 40). Gmelin describes his shell as turreted and compares it with the preceding species in his work, *Voluta turrita* (*Latirus turritus*), saying it is narrower and more elongate. Moreover, it is described as being white, with dark, wavy axial stripes, and smooth (Bonanni uses the word " nitens "). Hanley (1855, *Ipsa Linnaei Conch.* : 394) suggests that it was meant for the shell now known as *Mitrella scripta*, a verdict with which I am inclined to agree, as Gmelin's brief description seems to point to this identification. Bonanni's figure could be conceived as a poor representation of the species, although by a stretch of the imagination it could also be called a poor figure of *Pisania striata*. The latter is, in fact, the species with which workers like Deshayes (1844, *Hist. nat. Anim. s. Vert.* (ed. 2) **10** : 165), Philippi (1836, *Enum. Moll. Sicilia* **1** : 224), Petit (1869, *Cat. Moll. Test. Mers Europe* : 169), and Monterosato (1884, *Nomencl. Gen. e Spec. Medit.* : 113) have synonymized Gmelin's *Voluta syracusana*, the latter two authors doing so with a query. Bonanni's figure was also cited by Linnaeus under his *Murex pusio*, and here may be another reason for later authors equating *Voluta syracusana* with *Pisania striata*.

7. It is because of the uncertainty regarding the identity of *Voluta syracusana* Gmelin that I suggest that the type-species designation of Herrmannsen for *Pisania* be declared invalid, and that the next designation, that of Iredale (1915, *Trans. Proc. New Zealand Inst.* **47** : 464), of *Pisania striatula* Bivona as type-species, be accepted. It might be mentioned here that Iredale erroneously equates this species with " *B.* [*uccinum*] *maculosum* Gmelin " instead of *B. maculosum* Lamarck.

8. It is requested, therefore, that the International Commission on Zoological Nomenclature take the following action :—

(1) to use its plenary powers to set aside all designations of type-species for the genus *Pisania* Bivona, 1832, prior to that by Iredale, 1915, of *Pisania striatula* Bivona, 1832 ;

(2) to place the generic name *Pisania* Bivona, 1832 (gender : feminine), type-species, by designation under the plenary powers in (1) above, *Pisania striatula* Bivona, 1832, on the Official List of Generic Names in Zoology ;

(3) to place the specific name *striata* Gmelin, 1791, as published in the binomen *Murex striata* (oldest available name for the type-species of *Pisania* Bivona, 1832) on the Official List of Specific Names in Zoology.